

ABSTRACT OF THE DISCLOSURE

A computer-implemented solid modeling system provides a graph-based method for multi-bodied sweep terminations in a computer-implemented solid modeling system. A planar profile of one or more curves is generated, and the profile swept along a specified path to generate a tool body. The swept profile is terminated after the tool body interacts with a plurality of blank bodies to a predefined extent. The termination is comprised of three phases: (1) a pre-processing phase is performed to label faces and edges of the tool and blank bodies; (2) an analysis phase is performed to extract tool and blank graphs for the labeled faces and edges; and (3) a post-processing phase is performed to integrate results from the extracted tool and blank graphs.

TELETYPE UNIT
"Express Mail" mailing label number EL815952906US
Date of Deposit June 21, 2001
I hereby certify that this paper or fee is being de-
posited with the United States Postal Service "Express Mail
Post Office to Addressee" service under 39 USC 1104 at
the date indicated above and is addressed to
Commissioner for Patents, Washington, D.C. 20590.
Adrienne M Baird
(Printed Name)
Adrienne M Baird
(Signature)